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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,502	02/14/2005	Martin Backmann	P70337US0	6190

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EXAMINER	
THROWER, LARRY W	
ART UNIT	PAPER NUMBER
4111	

MAIL DATE	DELIVERY MODE
04/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/524,502	BACKMANN ET AL.	
	Examiner	Art Unit	
	LARRY THROWER	4111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/13/2005; 10/24/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "self cleaning" in claim 1 renders the claim indefinite. The specification of the instant application states that a self-cleaning surface arises if a hydrophobic surface has elevations and depressions, but that “these elevations must thereby maintain definite distances that may neither be exceeded nor fallen short of.” However, neither the specification nor the claims define the definite distances that must be maintained. Because the term "self cleaning" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite measure of distances that must be maintained, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention, the claim is indefinite.

4. Claim 1 recites the following limitations: "the blow factor"; “the length stretch factor”; and “the material.” There is insufficient antecedent basis for these limitations in the claim.

5. Claim 2 recites the limitation "the matter volumes." There is insufficient antecedent basis for this limitation in the claim.

6. Claims 3-13 are indefinite because they depend from indefinite claims 1 or 2.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Douglas *et al*. (International Publication No. WO 97/21531).

Regarding claim 1, Douglas *et al*. teaches a process for manufacturing blown film tubes (page 3, lines 25-30). The blown film tube is taken to capable of functioning as a self-cleaning in that it includes at least one hydrophobic surface that has elevations formed by particulates having particle size of .1-1500 micrometers and typically around 1-150 micrometers (claim 2; page 10, line 6; page 11 lines 4-5). The process includes forming a plastic melt in an extruder (page 9, lines 15 - 18), compressing the plastic melt in a blowing head that has a ring-shaped output gap (page 7, lines 24 – 26), extrusion of a film tube from the ring-shaped gap (page 7, lines 28-29), expansion of the radius of the film tube by creating a corresponding pressure inside the film tube (page 8, lines 24-26), squeezing the film tube with nip rollers and stretching the film tube in its axial direction (page 7, lines 29-30; page 8, lines 26-29). At least one surface of the film tube is provided with elevations which are formed from a selected material (page 5, lines 1-3; page 5, lines 12-15). The material required for the formation of the elevations

is added either before the extrusion of the plastic melt from the ring-shaped gap (claim 2), or is applied to at least one surface of the film tube after the extrusion (claim 11; page 10, lines 19-24).

Regarding claim 2, Douglas *et al*. discloses the material required for the formation of the elevations being a component of a second melt (claim 3).

Regarding claim 3, Douglas *et al*. discloses using particulates for the formation of the elevations (page 10, lines 20-28).

Regarding claim 4, Douglas *et al*. teaches the particulates being nanoparticles from 100 nanometers in size (page 11, lines 4-5).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5-13 are rejected under 35 U.S.C. 102(b) as being anticipated by **or** under 35 U.S.C. 103(a) as obvious over Douglas *et al*. (International Publication No. WO 97/21531) as applied to claim 1 (for claims 5-10), claim 2 (for claim 11), claim 3 (for claim 12) and claim 4 (for claim 13).

Regarding claims 5-13, Douglas *et al*. discloses the blow factor being up to four (page 8, lines 24-26), and the thickness of the blown film being dependent on the rate at which the extrudate is pulled away by the nip rollers (page 8, lines 26-29). When the

blow factor is four, the ratio of the blow factor to the length stretch factor would be expected to exceed 1/1 (the maximum claimed ratio of Claim 10 of the instant application) because any ratio less would require the rate at which the nip rollers pull the extrudate away to at least exceed the following:

16 times the extrusion rate (to avoid claims 5 and 11-13);

12 times the extrusion rate (to avoid claim 6);

8 times the extrusion rate (to avoid claim 7);

6 times the extrusion rate (to avoid claim 8);

4.4 times the extrusion rate (to avoid claim 9); and

4 times the extrusion rate (to avoid claim 10).

Such high length stretch factors, in combination with a blow factor of four, would be expected to thin the blown film toward, or beyond, its breaking point, and therefore defeat the purpose of Douglas *et al*. Thus, the claims are anticipated.

Alternatively and in any event, as taught by Douglas *et al*., the thickness of the resulting blown film is dependent on blow factor and length stretch factor (page 8, lines 26-29). It would have therefore been obvious to one of ordinary skill in the art at the time the invention was made to maintain the length stretch factor below 4-16 when the blow factor was 4 to maintain a desirable thickness as taught by Douglas *et al*. and avoid breaking the film because a broken film tube would be useless.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LARRY THROWER whose telephone number is (571)270-5517. The examiner can normally be reached on Monday through Thursday from 7:30AM-5PM est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam C. Yao can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. T./
Examiner, Art Unit 4111

/Sam Chuan C. Yao/
Supervisory Patent Examiner, Art Unit 4111